# EXHIBIT 137

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#### UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA ALEXANDRIA DIVISION

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United	States	$\alpha$ t	America,	ot	al
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Plaintiffs,

v.

Google LLC,

Defendant.

Case No. 1:23-cv-00108-LMB-JFA

Hon. Leonie H. M. Brinkema

### EXPERT REBUTTAL REPORT OF ROBIN S. LEE, PHD

February 13, 2024

- (466) Moreover, by comparing combinations of ad exchange and bidding tool fees, Dr. Israel also contrasts fees across DSPs and advertiser ad networks. As I discussed in Section IV.E of my initial report and reiterated in Section IV.E above, advertiser ad networks and DSPs offer distinct features to customers and are not close substitutes for one another (i.e., advertiser ad networks are a relevant product market over which a hypothetical monopolist would not be constrained from exercising market power by DSPs). As an example, advertisers using DV360 are able to choose which exchanges to buy on while advertisers using Google Ads, to a large extent, are restricted to purchasing on AdX.
- (467) Second, Dr. Israel's Figure 76 is misleading and incomplete: it is missing numerous bidding tool and ad exchange combinations. When analyzing fees for the full set of product combinations available in Israel's backup, and accounting for the size of these combinations, I find that combinations associated with Google products tend to have higher take rates, contrary to what Dr. Israel implies.
- In particular, Dr. Israel's Figure 76 excludes combinations of bidding tools and exchanges that include one Google tool and one non-Google tool. For example, Dr. Israel excluded combinations that include Google Ads bidding into a third party exchange such as or fees from a non-Google DSP like bidding into AdX. In sum, Dr. Israel excludes 25 of the available 90 combinations in the data. As an approximate illustration of the potential size of Dr. Israel's excluded categories, I use Dr. Israel's backup to estimate that these 25 combinations account for 48% of the amount of spend going through all 90 combinations.
- (469) To illustrate these issues with Dr. Israel's analysis, I created a figure that accounts for the relative sizes of Google's rivals, and includes the missing combinations from Dr. Israel's Figure 76.<sup>731</sup> I calculate weighted average fees across all non-Google bidding tools and across all non-Google exchanges. Figure 31 below plots average fees from combinations of Google products and the weighted average of non-Google products. There are three patterns in this figure:<sup>732</sup>
- (470) **Top panel of Figure 31**: Among take rate combinations where both products are not owned by the same company, average take rates where Google is one of the products are higher than average take rates where both products are non-Google. Average fees charged on transactions from Google Ads to third-party exchanges (top bar) are also higher than average fees charged on non-Google bidding tools to non-Google exchanges (bottom bar). Moreover, comparing the middle bar to the bottom bar,

To arrive at this illustration, I assume that each buying tool allocates spending according to each exchange's share. For example, transacted \$610M in gross revenues between 2020 and 2022. During that period, had a 1.9% share in the exchange market. Thus, assuming allocated 1.9% of its spending to to be about \$11.5M.

<sup>&</sup>lt;sup>731</sup> I rely on Dr. Israel's backup for his Figure 76, which includes Google data from RFP 243 as well as data from a number of third parties. These sources are described in detail in Appendix X.B of Dr. Israel's Report.

<sup>732</sup> Dr. Israel's Figure 76 is limited to impressions served to US users in datasets where such a restriction is possible. *See* Israel Report, ¶ 546 and Dr. Israel's backup materials. As such, I make the same restriction in Figure 31. In Appendix B I remove these restrictions and shows that the three patterns I describe also hold when I include worldwide impressions from companies where worldwide impressions are available in the data.

fees charged on transactions from non-Google bidding tools to AdX (middle bar) are higher on average than fees charged from non-Google bidding tools to non-Google exchanges (bottom bar).<sup>733</sup>

- (471) **Middle panel of Figure 31**: Google charges higher prices than competitors, on average, for transactions involving a bidding tool and an exchange owned by the same company. In the middle panel, comparing the top bar to the bottom bar, fees charged on transactions from Google Ads to AdX are higher on average than fees charged on transactions from This is the only other pair in Dr. Israel's Figure 76 that consists of a bidding tool and an exchange owned by the same company.
- (472) **Bottom panel of Figure 31**: The bottom panel shows that, for transactions involving DV360, fees are higher on average for transactions from DV360 to AdX (top bar) than on transactions from DV360 to non-Google exchanges (bottom bar).
- (473) Another of Dr. Israel's conclusions from Figure 76 is "the integrated fee when all Google tools are used is typically lower than the fee when a combination of non-Google tools is used, which is consistent with EDM."<sup>735</sup> Here, the weighted average price of DV360 and AdX are higher than the weighted average prices of its rivals, which does not support Dr. Israel's claims regarding EDM.<sup>736</sup>

<sup>733</sup> The other comparison available in the top panel of Figure 31 shows that fees charged on transactions from Google Ads to third-party exchanges (top bar) are higher on average than fees charged on transactions from non-Google bidding tools to AdX (middle bar).

This is the only other pair in Dr. Israel's Figure 76 that consists of a bidding tool and an exchange owned by the same company. The bottom panel shows that the combined average fee for DV360-AdX is also higher than that for

<sup>&</sup>lt;sup>735</sup> See Israel Report, ¶ 485.

<sup>&</sup>lt;sup>736</sup> See also Section IX.A.1.

Google Ads (3PE)-3PE 3P bidding tool-AdX 3P bidding tool-3PE Google Ads (AdX)-AdX DV360-AdX DV360-3PE 0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% Approx. average fee (2020-2022)

Figure 31. Dr. Israel's estimates of US combined advertiser bidding tool and exchange fees weighting non-Google products (2020–2022)

Source: Backup materials for Israel Report, Figure 76: Israel exchange panel.

Notes: "3P bidding tool" represents an average fee across non-Google bidding tools. "3PE" represents an average fee across non-Google exchanges. I calculate these averages among all bidding tools and exchanges Dr. Israel includes in his Figure 76. I rely on Dr. Israel's data processing and methodology for calculating combined fees taken by bidding tools and exchanges in his Figure 76 to calculate an approximate average fee across combinations of Google and non-Google bidding tools and exchanges. Dr. Israel's Figure 76 includes indirect web display transactions as well as programmatic direct transactions, impressions served on mobile apps and other devices, and video and audio ads. He includes a version limited to indirect web non-video transactions in his backup materials. I include a version of this figure limited to observations Dr. Israel identifies as indirect web non-video transactions in Appendix B.

(474) Last, Dr. Israel reports fee trends for AdX and Google Ads in Figures 71 and 72 of his report. He claims that "these are generally flat or declining over the periods of available data." I addressed Dr. Israel's flawed reliance on trends to inform questions related to market power in Section IV.A.5, and discuss this further in VIII.A.1.

### V.C.3. AdX's greater ability to monetize publisher inventory is a quality advantage that contributes to its market power

(475) Dr. Israel and Prof. Chevalier note that "quality differences" can affect fees charged by ad tech products, including AdX.<sup>737</sup> Economists often use "quality" to refer to non-price features of a product

 $<sup>^{737}</sup>$  See, e.g., Israel Report,  $\P$  549-551; Chevalier Report,  $\P$  84-87.

- Tying is one way in which firms can disadvantage and foreclose rivals selling an alternative to the tied product that customers might otherwise prefer. Tying can be beneficial to the firm if its rivals in the tied product exit or otherwise see their competitiveness is diminished, enhancing the firm's market power in the tied product. Tying can also be used to preserve or protect market power in adjacent markets by preventing prospective rivals in the tying and tied products from becoming effective competitors. To give a concrete example, conduct toward browsers may have protected its market power in operating systems. 817
- (529) **2. Impeding customers from working with rivals**: There are several ways firms with substantial market power can exclude competition by eliminating or impeding customers' abilities to transact with rivals. One approach is to use contractual terms such as a "most favored nation" (MFN) policy. Sellers operating under a platform's MFN policy might be prevented from offering rival platforms a lower price than they offer the platform with the MFN, which can inhibit the growth or entry of competing platforms. As with foreclosure, MFNs can (i) enhance the market power of the firm using them, (ii) soften competition with rivals, and (ii) divert sales away from rivals. The economics literature recognizes that MFNs can have anticompetitive effects.<sup>818</sup>
- (530) Another approach would be for a firm to acquire actual or potential rivals, then make post-acquisition decisions that worsen competitive outcomes for customers. For example, an acquiring firm could merge two competing products into one, or merely eliminate one altogether. The economic literature has noted the ability of acquisitions, absent offsetting benefits, to weaken competition to the detriment of customers.<sup>819</sup>
- (531) Notably, the five acts discussed in my report do not comprise conduct that solely improves Google's quality or reduces its prices, nor do they harm competition by merely "harming rivals." Rather, the conduct harms competition by

<sup>816</sup> For economic literature on tying, see, e.g., Michael D. Whinston, "Tying, Foreclosure, and Exclusion," American Economic Review 80, no. 4 (1990), 837–859; and Dennis W. Carlton and Michael Waldman, "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," RAND Journal of Economics 33, no. 2 (2002), 194–220.

<sup>&</sup>lt;sup>817</sup> See Lee Initial Report, ¶ 562, n. 810.

For economic literature on MFNs, see, e.g., Andre Boik and Kenneth S. Corts, "The Effects of Platform Most-Favored-Nation Clauses on Competition and Entry" Journal of Law and Economics 59, no. 1 (2016), 107 ("[S]uch policies disadvantage potential platform entrants—especially those with low-end business models—by eliminating an entrant's ability to win customers away from incumbent platforms through lower prices."); Dennis W. Carlton and Ralph A. Winter, "Vertical Most-Favored-Nation Restraints and Credit Card No-Surcharge Rules," Journal of Law and Economics 61, no. 2 (2018), 215–251; and Jonathan B. Baker and Fiona Scott Morton, "Antitrust Enforcement against Platform MFNs," Yale Law Journal 127, no. 8 (2018), 2176–2202

<sup>819</sup> For economic literature on acquisitions, *see*, *e.g.*, Joseph Farrell and Carl Shapiro, "Horizontal Mergers: An Equilibrium Analysis," *American Economic Review* 80, no. 1 (1990), 107–126; and Colleen Cunningham, Florian Ederer, and Song Ma, "Killer Acquisitions," *Journal of Political Economy* 129, no. 3 (2021), 649–702.

- 1) Impeding rivals' ability to compete for advertising spending and publisher inventory, worsening of the quality of products that are available to customers, and lessening customer choice;
- 2) Denying competing products with scale, further worsening their qualities and attractiveness to customers;
- thereby enhancing Google's market power. It is also important to note that channel (1) alone is sufficient to enhance Google's market power and lead to competitive harms. For example, consider Google's decision to foreclose rival ad exchanges from Google Ads demand by withholding and degrading access. As I have shown, this conduct meaningfully worsens rivals' ability to monetize impressions<sup>820</sup>—recognized by industry participants as the key feature that matters to publishers<sup>821</sup>—and reduces their attractiveness to customers. This handicapping of rivals via foreclosure alone weakens their ability to discipline Google's market power.<sup>822</sup> Hence, even if adverse scale effects on rivals from Google's conduct were absent (which I and Profs. Ravi and Weintraub have opined is not the case), Google's conduct would still generate competitive harm.
- (533) Last, it is important to recognize that conduct that is undertaken by a firm lacking "monopoly power" is unlikely to generate the same anticompetitive concerns that the same conduct undertaken by a firm possessing such market power. 823 Hence, claiming that other firms engage in similar conduct, as Dr. Israel 824 and Prof. Milgrom 825 do, does not at all indicate that Google's conduct is not anticompetitive.

<sup>820</sup> Lee Initial Report, §§ VII.B and VII.F.1

<sup>821</sup> See Section V.C.3.

<sup>822</sup> To see why an ad exchange's ability to generate greater monetization contributes to its market power, consider the following simple example: assume there are two ad exchanges, where the first is able to offer publishers \$0.95 CPM, whereas the second can offer publishers \$1.00 CPM. Because the second exchange can better monetize the impression, it can charge up to a 5% take rate and still beat the first exchange.

<sup>823</sup> Lee Initial Report, ¶ 556.

<sup>&</sup>lt;sup>824</sup> See, e.g., Israel Report, ¶¶ 636, 727.

<sup>825</sup> See, e.g., Milgrom Report, Table 1, ¶¶ 344, 462.